## Claims



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An agrochemical composition comprising an agrochemical active ingredient and an adjuvant of formula (I) and salts thereof

$$X - (R^3O)_a - R^4 - N R^2 R^1$$
 (I)

wherein R1 and R2 are independently hydrogen or a lower alkyl group containing from 1 to 4 carbon atoms,

R<sup>3</sup>O is an ethoxy, propoxy or butoxy group or a random or block mixture thereof, R4 is a linear or branched chain alkylene bridging group containing from 1 to 4 carbon atoms, X is

(IA) -OH or a lower alkoxy group containing from 1 to 4 carbon atoms or X is

(IB) a group RSRN-15 wherein R5 and R6 are independently hydrogen or a lower alkyl group containing from 1 to 4 carbon atoms or X is (IC) a group

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$$CH_2 - O-$$
|
 $CR^{18} - (R^{21})_d - O-(R^8O)_b - R^9 - NH_2$ 
|
 $CH_2 - O - (R^{12}O)_c - R^{13} - NH_2$ 

wherein R<sup>8</sup>O and R<sup>12</sup>O are independently ethoxy, or propoxy or a random or block mixture thereof, R<sup>9</sup> and R<sup>13</sup> are independently a linear or branched chain alkylene bridging group containing 2 or 3 carbon atoms,\R21 is a linear or branched chain alkylene bridging group containing from 1 to 3 darbon atoms, R18 is hydrogen or lower alkyl containing from 1 to 4 carbon atoms. It is 0 or 1, and wherein a, is from 1 to 400 or if X is of formula IC, the sum of a, b and c is from

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3 to 400,

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provided that when X is of formula (1B), the adjuvant of formula (1) does not have the structure

 $CH_{1}$ 

wherein n is 2 or 3.

- A composition according to claim 1 wherein a is from 1 to 50 or if X is of formula 2. IC, the sum of a, b and c is from 3 to 90.
- Accomposition according to claim 1 wherein the adjuvant of formula (I) is an alkoxylated monoamine, having the formula II

$$C_{H_3} - O - (-CH_2CH_2O -)_x - (-CH_2 - CH(CH_3) - O -)_y - CH_2 - CH(CH_3) - NH_2(II)$$

wherein the average degree of ethoxylation (x) is from 0 to about 45 and the average degree of propoxylation (y) is from 0 to about 90 provided that x and y are not both 0 at the same time.

A composition according to claim 3 wherein the value of x is from 0 to about 20 and of y is from about 2 to about 30.

A composition according to claim 1 wherein the compound of formula (I) is a diamine having a formula (II)

$$H_2^2N-(CH(CH_3)-CH_2-O)_w$$
 -CH<sub>2</sub>-CH(CH<sub>3</sub>)-NH<sub>2</sub> (III)

wherein w is an average of from about 1 to about 80.

A composition according to claim 5 wherein w is an average of from about 2 to about 35

A composition according to claim 1 wherein the compound of formula (I) is a diamine having a formula (IV)

H<sub>2</sub>N-(CH(CH<sub>3</sub>)-CH<sub>2</sub>-O),-(CH<sub>2</sub>CH<sub>2</sub>-O),-(CH<sub>2</sub>-CH(CH<sub>3</sub>)-O-), -CH<sub>2</sub>-CH(CH<sub>3</sub>)NH<sub>2</sub> (IV) wherein the sum of r + t is an average of from 1 to 20 propoxy groups and s is an average of from 2 to 50 ethoxy units.

- A composition according to claim 7 wherein the sum of r + t is from about 2 to about 30 15 and s is from about 3 to about 20.
  - A composition according to claim 1 wherein the compound of formula (I) is a 9. propoxylated triamine having the formula (V)

CH<sub>2</sub> - O-(CH<sub>2</sub>-CH(CH<sub>3</sub>)-O)<sub>d</sub>-CH<sub>2</sub>CH(CH<sub>3</sub>)-NH<sub>2</sub>

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$$CR^{22} - (R^{21})_4 - O - (CH_2 - CH(CH_3) - O)_e - CH_2 CH(CH_3) - NH_2$$
 (V) |  $CH_2 - O - (CH_2 - CH(CH_3) - O)_f - CH_2 CH(CH_3) - NH_2$ 

wherein the sum of d + e + f is an average of from about 5 to 90,  $R^{22}$  is hydrogen or lower alkyl containing 1 to 4 carbon atoms.  $R^{21}$  is a linear or branched chain alkylene bridging group containing 1 to 3 carbon atoms and d is 0 or 1.

10. A composition according to any of the preceding claims wherein the proportion of adjuvant of formula (I) to the agrochemical is from 1:20 to 3:1 by weight.

A composition according to any of the preceding claims wherein the adjuvant of formula (I) in claim 1 is used in combination with an alkylpolyglycoside surfactant.

A composition according to claim 11 wherein the ratio of the adjuvant of formula (I) to the alkylpolyglycoside surfactant is from 1:40 to 4:1.

A composition according to any of the preceding claims wherein the agrochemical active ingredient is a salt of glyphosate, a salt of fomesafen or a paraquat salt.

A composition according to any of claims 1 to 12 wherein the adjuvant of formula (I)

in claim 1 is used in the form of a salt with glyphosate or a salt with an acidic surfactant.

A process of severely damaging or killing unwanted plants which process comprises applying to the plants or to the growth medium of the plants, a herbicidally effective amount of a composition as claimed in any of claims 1 to 14.

16. A composition according to any of claims 1 to 14 which is an aqueous composition containing from 0.01% to 90% by weight of the active ingredient.

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